# **DRAFT FISCAL NOTE**

REQUEST NO.

RESPONDING AGENCY:	CODE:	DATE:	BILL NUMBER:	
Office of the State Actuary	035	11/16/06	Z-0267.2	

#### **SUMMARY OF BILL:**

This bill impacts the following retirement systems and public employees:

- Public Employees' Retirement System (PERS),
- Teachers' Retirement System (TRS),
- School Employees' Retirement System (SERS),
- Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF),
- Washington State Patrol Retirement System (WSP),
- Public Safety Employees' Retirement System (PSERS),
- Volunteer Fire Fighters' Relief and Pension Fund (VFF);
- members of the Judicial Retirement System (JRS),
- members of the Higher Education Retirement Plans (HIED);
- and state, school district, and higher education employees who are not members of a state retirement system.

This bill indexes the amount of the \$150,000 duty-death lump sum benefit to changes in the Consumer Price Index for Urban Wage Earners and Clerical Workers, Seattle-Tacoma-Bremerton (CPI-W). The index is calculated based on cumulative changes in the CPI-W with a maximum annual change of no more than 3%. The amount of the death benefit is not allowed to decrease below the original amount in periods of deflation. This bill also expands eligibility for the death benefit to include death from occupational disease or duty-related illness for members of PERS, TRS, SERS, LEOFF Plan 1, WSP, PSERS, JRS, HIED; and state, school district and higher education employees who are not members of a state retirement system.

Effective Date: July 1, 2007

#### **CURRENT SITUATION:**

Survivors of public employees who die as a result of injuries sustained in the course of employment are eligible to receive a lump sum death benefit of \$150,000. The benefit amount does not adjust for inflation. This benefit is provided for all members of PERS, TRS, SERS, LEOFF, WSP, PSERS, VFF, JRS, HIED; and to state, school district and higher education employees who are not members of a state retirement system. The benefit is also provided for members of LEOFF Plan 2 and VFF who die from an occupational disease or duty-related illness. The amount of the lump sum death benefit is \$152,000 in VFF.

#### **MEMBERS IMPACTED:**

Any of the more than 465,000 estimated active, retired, disabled, and terminated vested members of PERS, TRS, SERS, LEOFF, WSP, PSERS, JRS, HIED, and the VFF retirement systems who die from duty-related causes may be impacted. State, school district, and higher education employees who are not members of a state retirement system and who die from duty-related causes may also be impacted.

It is expected that fewer than 13 duty-related deaths will occur each year. It is also expected that fewer than one additional death benefits will be paid each year due to the expansion of the eligibility criteria for death from duty-related illness.

The amount of the duty-death lump sum benefit may increase by up to 3% each year under this bill. On July 1, 2007, the amount of the duty-death lump sum benefit would increase to \$154,500 (\$156,560 for VFF) if inflation, as measured by the CPI-W, averages 3% or more between 2005 and 2006.

### **ASSUMPTIONS:**

- 1. The rate of duty-related death will not change because the death benefit is indexed.
- 2. An index based on the CPI-W with a 3% yearly maximum is equivalent to a long term average increase of 2.96% a year. This assumption was developed using stochastic projections of expected inflation.
- 3. The inclusion of public employees who are not PERS, SERS, or TRS members does not increase the estimated number of eligible deaths.
- 4. The estimated increase in the duty death rate for duty-related illness is 10% for all systems except LEOFF 1. LEOFF 1 is 40%.
- The liability for benefits paid to inactive members for death from duty-related illness will be proportionate to the number of benefits paid and will remain relatively constant as a percentage of the active liability for the benefit.
- 6. 20% of the currently inactive members (term vested, retired, and disabled) will be exposed to death from duty-related illness at 50% of the rate the active population is exposed.
- 7. Based on assumptions #5 and #6, the increase in liability for inactives as a percent of active liability is:

LEOFF 1	100%
LEOFF 2	0%
WSP	10%
PERS and TRS 1	40%
PERS 2/3, SERS 2/3, TRS 2/3, VFF, HIED	2%

- 8. The contribution rate increase calculated for PERS will apply to PSERS.
- 9. The current active VFF population will decrease by an average rate of 8% a year due to terminations, retirement, and deaths.
- 10. The rate of duty-related death for VFF is .000083 for all ages.

### FISCAL IMPACT:

# **Description:**

This bill would increase the dollar amount of the lump sum death benefit for future recipients and would likely increase the total number of lump sum death benefits paid.

### **Actuarial Determinations:**

The bill will impact the actuarial funding of the system by increasing the present value of benefits payable under the System and the required actuarial contribution rate as shown below. This bill will increase the contribution rate for WSP, however, the liability increases in all other systems are insufficient to affect contribution rates. Liabilities for PSERS are included in the PERS totals.

(Dollars in Millions)		Current	Increase	Total
Actuarial Present Value of Projected	PERS 1	\$13,604.57	\$0.06	\$13,604.63
Benefits	PERS 2/3	\$16,996.53	\$1.19	\$16,997.72
(The Value of the Total Commitment to all Current	TRS 1	\$10,822.98	\$0.01	\$10,822.99
Members)	TRS 2/3	\$6,296.52	\$0.20	\$6,296.72
	SERS 2/3	\$2,472.81	\$0.36	\$2,473.17
	LEOFF 1	\$4,238.27	\$0.05	\$4,238.32
	LEOFF 2	\$5,461.85	\$0.72	\$5,462.57
	WSP 1/2	\$803.40	\$0.08	\$803.48
	VFF	\$146.24	\$0.42	\$146.66
Unfunded Actuarial Accrued Liability	PERS 1	\$3,566.71	\$0.06	\$3,566.77
(The Portion of the Plan 1 Liability that is Amortized at	TRS 1	\$2,146.89	\$0.01	\$2,146.90
2024)	LEOFF 1	\$(583.68)	\$0.05	\$(583.63)
Unfunded Liability (PBO)	PERS 1	\$3,439.44	\$0.06	\$3,439.50
(The Value of the Total Commitment to all	PERS 2/3	\$(2,611.15)	\$0.67	\$(2,610.48)
Current Members Attributable to Past Service)	TRS 1	\$2,100.31	\$0.01	\$2,100.32
	TRS 2/3	\$(1,130.92)	\$0.10	\$(1,130.82)
	SERS 2/3	\$(314.69)	\$0.21	\$(314.48)
	LEOFF 1	\$(576.78)	\$0.05	\$(576.73)
	LEOFF 2	\$(396.81)	\$0.39	\$(396.42)
	WSP 1/2	\$(80.19)	\$0.06	\$(80.13)
	VFF	\$6.97	\$0.38	\$7.35

# **Increase in Contribution Rates:**

(Effective 09/01/2007)

Current Members	WSP
Employee	0.01%
Employer State	0.01%
New Entrants*	
Employee	0.01%
Employer State	0.01%

<sup>\*</sup>Rate change applied to future new entrant payroll and used for fiscal budget determinations only. A single supplemental rate increase, equal to the increase for current members, would apply initially for all members or employers.

# **Fiscal Budget Determinations:**

As a result of the higher required contribution rate, the increase in funding expenditures is projected to be:

Costs (in Millions):	WSP
2007-2009 State:	
General Fund	\$0.0
Non-General Fund	0.0
Total State	0.0
Local Government	0.0 0.0
Total Employer	
Total Employee	\$0.0
2009-2011 State:	
General Fund	\$0.0
Non-General Fund	0.0
Total State	0.0
Local Government	0.0
Total Employer	0.0
Total Employee	\$0.0
2007-2032 State:	
General Fund	\$0.0
Non-General Fund	0.4
Total State	0.4
Local Government	0.0
Total Employer	0.4
Total Employee	\$0.4

### STATEMENT OF DATA AND ASSUMPTIONS USED IN PREPARING THIS FISCAL NOTE:

The costs presented in this fiscal note are based on our understanding of the bill as well as generally accepted actuarial standards of practice including the following:

- 1. Costs were developed using the same membership data, methods, assets and assumptions as those used in preparing the preliminary September 30, 2005 actuarial valuation report of the Public Employees' Retirement System, the Teachers' Retirement System, the School Employees' Retirement System, the Law Enforcement Officers' and Fire Fighters' Retirement System, the Washington State Patrol Retirement System, and the Volunteer Fire Fighters' Relief and Pension Fund. We used counts of HIED membership as of October 2003 in estimating the number of members impacted. We relied upon the 2006 Key Facts published by the Higher Ed Coordinating board to obtain the counts of HIED membership.
- 2. As with the costs developed in the actuarial valuation, the emerging costs of the System will vary from those presented in the valuation report or this fiscal note to the extent that actual experience differs from that projected by the actuarial assumptions.
- 3. Additional assumptions used to evaluate the cost impact of the bill which were not used or disclosed in the actuarial valuation report include the following:

We relied on documentation of claims administration provided by the Department of Labor and Industries in setting our assumptions for increases in the rate of duty-related death.

- 4. The analysis of this bill does not consider any other proposed changes to the system. The combined effect of several changes to the system could exceed the sum of each proposed change considered individually.
- 5. This draft fiscal note is intended for use only during the 2007 Legislative Session.
- 6. The funding method used for Plan 1 utilizes the Plan 2/3 employer/state rate as the Normal Cost and amortizes the remaining liability (UAAL) by the year 2024. Benefit increases to Plan 2/3 will change the UAAL in Plan 1. The cost of benefit increases to Plan 1 increases the UAAL.
- 7. Plan 2/3 utilizes the Aggregate Funding Method. The cost of Plan 2/3 is spread over the average working lifetime of the current active Plan 2/3 members.
- 8. Entry age normal cost rate increases are used to determine the increase in funding expenditures for future new entrants. Aggregate rate increases are used to calculate the increase in funding expenditures for current plan members.

### **GLOSSARY OF ACTUARIAL TERMS:**

**Actuarial accrued liability:** Computed differently under different funding methods, the actuarial accrued liability generally represents the portion of the present value of fully projected benefits attributable to service credit that has been earned (or accrued) as of the valuation date.

**Actuarial Present Value:** The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions (i.e. interest rate, rate of salary increases, mortality, etc.)

**Aggregate Funding Method:** The Aggregate Funding Method is a standard actuarial funding method. The annual cost of benefits under the Aggregate Method is equal to the normal cost. The method does not produce an unfunded liability. The normal cost is determined for the entire group rather than an individual basis.

**Entry Age Normal Cost Method (EANC):** The EANC method is a standard actuarial funding method. The annual cost of benefits under EANC is comprised of two components:

- Normal cost; plus
- Amortization of the unfunded liability

The normal cost is determined on an individual basis, from a member's age at plan entry, and is designed to be a level percentage of pay throughout a member's career.

**Normal Cost:** Computed differently under different funding methods, the normal cost generally represents the portion of the cost of projected benefits allocated to the current plan year.

**Pension Benefit Obligation (PBO):** The portion of the Actuarial Present Value of future benefits attributable to service credit that has been earned to date (past service).

**Projected Benefits:** Pension benefit amounts which are expected to be paid in the future taking into account such items as the effect of advancement in age as well as past and anticipated future compensation and service credits.

**Unfunded Liability (Unfunded PBO):** The excess, if any, of the Pension Benefit Obligation over the Valuation Assets. This is the portion of all benefits earned to date that are not covered by plan assets.

**Unfunded Actuarial Accrued Liability (UAAL):** The excess, if any, of the actuarial accrued liability over the actuarial value of assets. In other words, the present value of benefits earned to date that are not covered by plan assets.